



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: April 16, 2009

RE: Powder Technology / 039-27524-00690

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot12/3/07



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Mr. Mike Clickovich
Powder Technology
P.O. Box 1584
Elkhart, IN 46515

April 16, 2009

Re: Exempt Construction and Operation Status,
039-27524-00690

Dear Mr. Clickovich:

The application from Powder Technology, received on February 23, 2009, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following stationary powder coating facility located at 1715 W Lusher Ave., Elkhart is classified as exempt from air pollution permit requirements:

- (a) One (1) powder coating line, equipped with one (1) manual spray gun, applying coatings to steel and aluminum trailers and trailer parts, identified as PB-1, approved for construction in 2009, with a maximum coating capacity of 1 frame per hour and 13.75 pounds of powder per hour, using fabric filter as an integral part of the process, and exhausting inside the building.
- (b) One (1) natural gas-fired heater, identified as O-1, approved for construction in 2009, with a maximum heat input capacity of 1 MMBtu per hour.

The following conditions shall be applicable:

1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
2. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
3. The fabric filter is considered an integral part of the powder coating booth; therefore, particulate from the powder coating booth shall be controlled by the fabric filter at all times that the powder coating booth is in operation.

This exemption is the first air approval issued to this source. A copy of the Exemption is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units; modify existing emission units, or otherwise modify the source. If you have any questions on this matter, please contact Jillian Bertram, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-234-5377 or at 1-800-451-6027 (ext 45377).

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

IC/JLB

cc: File - Elkhart County
Elkhart County Health Department
Compliance and Enforcement Branch
Billing, Licensing and Training Section

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Description and Location
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Source Name:	Powder Technology
Source Location:	1715 West Lusher Avenue, Elkhart, IN 46516
County:	Elkhart
SIC Code:	3479
Exemption No.:	039-27524-00690
Permit Reviewer:	Jillian Bertram

On February 23, 2009, the Office of Air Quality (OAQ) received an application from Powder Technology related to the construction and operation of a new powder coating facility.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM2.5**
 Elkhart County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for

PM2.5 emissions until 326 IAC 2-2 is revised.

- (c) Other Criteria Pollutants
Elkhart County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.1-1 (Exemptions) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Powder Technology on February 23, 2009, relating to the construction and operation of a new powder coating source.

The following is a list of the emission units and pollution control devices:

- (a) One (1) powder coating line, equipped with one (1) manual spray gun, applying coatings to steel and aluminum trailers and trailer parts, identified as PB-1, approved for construction in 2009, with a maximum coating capacity of 1 frame per hour and 13.75 pounds of powder per hour, using fabric filter as an integral part of the process, and exhausting inside the building.
- (b) One (1) natural gas-fired heater, identified as O-1, approved for construction in 2009, with a maximum heat input capacity of 1 MMBtu per hour.

“Integral Part of the Process” Determination

The applicant has submitted the following information to justify why the filter booth should be considered an integral part of the powder coating process:

- (a) The net economic benefit of recovering and reusing powder is approximately \$34,000 per year; and
- (b) at least 92% of the reclaimed powder will be reused.

IDEM, OAQ has evaluated the information submitted and agrees that the filter booth should be considered an integral part of the spray coating process. This determination is based on the fact that the economic benefit is significantly greater than the cost and the majority of the product is reused. Therefore, the primary purpose of the filter booth is not for pollution control. Therefore, the permitting level will be determined using the potential to emit after the filter booth. Operating conditions in the proposed permit will specify that this filter booth shall operate at all times when the powder coating line is in operation. This determination was similar to the determination made for IKG Industries, Garrett, IN under Exemption No. 033-24347-00099, issued on May 1, 2007.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Exemption

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM10 *	PM2.5	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
PB-1	0.24	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00
O-1	0.01	0.03	0.03	0.12	0.44	0.02	0.37	0.1	0.01 - hexane
Total PTE of Entire Source	0.25	0.27	0.27	0.12	0.44	0.02	0.37	0.01	0.01 - hexane
Exemptions Levels	5	5	5	10	10	5 or 10	25	25	10
Registration Levels	25	25	25	25	25	25	100	25	10
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".									

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60, Subpart EE (326 IAC 12), are not included in the permit, since this source coats only metal trailers and trailer parts.
- (b) The requirements of the New Source Performance Standard for Automobile and Light Duty Truck Surface Coating Operations, 40 CFR 60, Subpart MM (326 IAC 12), are not included in the permit, since this source is not an automobile or light duty truck assembly plant.
- (c) The requirements of the New Source Performance Standard for Industrial Surface Coating: Large Appliances, 40 CFR 60, Subpart SS (326 IAC 12), are not included in the permit, since this source coats only metal trailers and trailer parts.
- (d) The requirements of the New Source Performance Standard for Metal Coil Surface Coating, 40 CFR 60, Subpart TT (326 IAC 12), are not included in the permit, since this source coats only metal trailers and trailer parts.

- (e) The requirements of the New Source Performance Standard for the Beverage Can Surface Coating Industry, 40 CFR 60, Subpart WW (326 IAC 12), are not included in the permit, since this source coats only metal trailers and trailer parts.
- (f) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (g) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR 63.1116, Subpart HHHHHH, are not included in the permit, since this source does not strip paint, engage in autobody refinishing, or use coatings containing target HAPs.
- (h) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (i) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-5.1-1 (Exemptions)
Exemption applicability is discussed under the Permit Level Determination – Exemption section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a

continuous opacity monitor) in a six (6) hour period.

- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.

Powder Coating Operation

- (g) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(b)(14), the powder coating booth is exempt from the requirements of 326 IAC 6-3, because it has a potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour. IDEM, OAQ has agreed that the powder coating recovery system is an integral part of the powder coating booth and the potential to emit particulates (PM/PM10) was determined after the powder coating recovery system.

Heater

- (h) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
The Heater, O-1, is exempt from the requirements of 326 IAC 6-3-2 pursuant to 326 IAC 6-3-1(b)(12), since the heater emits less than 0.551 lbs per hour of particulate matter.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on February 23, 2009.

The construction and operation of this source shall be subject to the conditions of the attached proposed Exemption No. 039-27524-00690. The staff recommends to the Commissioner that this Exemption be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Jillian Bertram at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317)234-5377 or toll free at 1-800-451-6027 extension 4-5377.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Appendix A: Emissions Calculations
Powder Coating**

Company Name: Powder Technology
Address City IN Zip: 1715 W Lusher Ave., Elkhart, IN 46516
Permit Number: 039-27524-00690
Reviewer: Jillian Bertram
Date: 3/6/2009

Powder Coating Delivery Rate*	13.75	lbs/hr
Transfer Efficiency	60.00%	
Uncontrolled PM/PM10	5.5	lbs/hr
Uncontrolled PM/PM10	24.09	tons/yr
Control Efficiency**	99.00%	
Controlled PM/PM10	0.2409	tons/yr

* The powder coating delivery rate and transfer efficiency were provided by the source.

** The control (filter) is considered an integral part of the powder coating process.
See TSD for the evaluation.

Methodology

Uncontrolled PM/PM10 (lbs/hr) = Powder Coating Delivery Rate (lbs/hr) * (1-Transfer Efficiency (%))

Uncontrolled PM//PM10 (tons/yr) = Uncontrolled PM/PM10 (lbs/hr) * 8760 (hrs/yr) / 2000 (lbs/ton)

**Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100**

Company Name: Powder Technology
Address City IN Zip: 1715 W Lusher Ave., Elkhart, IN 46516
Permit Number: 039-27524-00690
Reviewer: Jillian Bertram
Date: 3/6/2009

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.0

8.8

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	28.5	100	5.5	84
				**see below		
Potential Emission in tons/yr	0.01	0.03	0.12	0.44	0.02	0.37

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 3 for HAPs emissions calculations.

**Appendix A: Emissions Calculations
 Natural Gas Combustion Only
 MM BTU/HR <100
 HAPs Emissions**

**Company Name: Powder Technology
 Address City IN Zip: 1715 W Lusher Ave., Elkhart, IN 46516
 Permit Number: 039-27524-00690
 Reviewer: Jillian Bertram
 Date: 3/6/2009**

	HAPs - Organics				
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	9.198E-06	5.256E-06	3.285E-04	7.884E-03	1.489E-05

	HAPs - Metals				
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	2.190E-06	4.818E-06	6.132E-06	1.664E-06	9.198E-06

Methodology is the same as page 2.

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Source-Wide Emissions Summary**

Company Name: Powder Technology
Address City IN Zip: 1715 W Lusher Ave., Elkhart, IN 46516
Permit Number: 039-27524-00690
Reviewer: Jillian Bertram
Date: 3/6/2009

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single Worst HAP (tons/yr)	Total HAPs (tons/yr)
PB-1*	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00
O-1	0.01	0.03	0.12	0.44	0.02	0.37	0.01 - hexane	0.01
Total	0.25	0.27	0.12	0.44	0.02	0.37	0.01 - hexane	0.01

* The filter booth is considered integral to the process, therefore, the potential to emit is calculated after control for the paint booth